

A Work Project, presented as part of the requirements for the Award of a Masters Degree in Management from the NOVA – School of Business and Economics.

How can sponsoring of sports teams influence healthy eating on children?

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A Project carried out on the Children Consumer Behaviour Field Lab, under the supervision of:
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January 2015

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How can sponsoring of sports teams influence healthy eating on children?

Abstract

This research aims to evaluate the impact of sports sponsorship of a healthy food brand (*Mimosa*) on children's eating habits and on their consumer behavior. While previous research on sponsorship was mainly focused on measuring its' effects on middle-aged adults, our study targeted children between 7 and 11 years old. Through a structured questionnaire responded by a sample of 136 children, we were able to measure their knowledge and attitudes towards the brand and the product, their perception about the persuasive intent of the sponsor and their behavior and attitudes towards healthy eating. Our results suggest that although children already have some knowledge and attitudes towards healthy brands as well as indications about caring about their eating behavior, that does not seem to be triggered by the sponsor. Moreover, they do not appear to understand yet the persuasive intent of the sponsor at these ages.

Keywords: Children, Sports Sponsorship, Mimosa, Healthy Eating, Consumer Behaviour

Introduction

Companies are nowadays using sports sponsorships as an effective marketing strategy to reach a wide variety of consumers that are passionate about sports events/teams or who have a particular interest in a specific sport. In the United States, sponsorship expenditures have registered a significant increase from \$8.5 billion in 2002 (Mason, 2005) to \$19.8 billion in 2013 (IEG, 2014). The challenge for sponsors is to create emotional bonds with fans, by understanding their emotions and showing that they are bringing value for their team or for the sport. Furthermore, it is more and more common for companies in the food market to promote their products to young people. Food brands can influence children's choices and, therefore, their eating habits; and unhealthy food brands usually have a greater impact on children's decisions. In fact, there is a high proportion of sponsors with the potential for promoting products that may threaten health (Maher et al., 2006). Therefore, when brands are sponsoring sports events/teams, they are actually inducing children to consume their unhealthy products and triggering a wrong idea about what is healthier. While sponsors may argue that they are not intentionally targeting children, it is clear that they are potentially making children confused about what is a healthy lifestyle. Having in mind that there are 35 million children playing organized/federated sports¹, sports sponsorship can be an ideal vehicle for health promotion companies to reach a younger audience, by taking advantage of the high connection between children and sports. Thus, the purpose of this research is to study if healthy food brands can have the same impact that unhealthy food brands already have in influencing children's eating habits. This could also

¹ <http://www.statisticbrain.com/youth-sports-statistics/>

help to gain a better understanding of the impact of sport sponsorship over children's eating habits. As so, this research aims to answer to the following research question: "How can sponsoring of sports teams influence healthy eating on children?".

Literature Review and Research Questions

Sponsorship and Sports Sponsoring

According to Cornwell and Maignan (1998), Sponsoring is considered to be a distinct channel that complements a firm's marketing communication program. In fact, by comparing the annual growth between advertising, marketing/promotions and sponsorship in North American countries, we can note that since 2011, sponsorship has been growing more than both advertising and marketing/promotion (IEG, 2014). The same source also refers that North American companies are expected to spend approximately \$20.6 Billion in 2014, which represents a significant growth compared with the previous year of 2013 (\$19.8 Billion). That shows us the importance that nowadays sponsorship has to companies. In a global scale, we can also observe that total global sponsorship spending is increasing in the past few years and is expected to reach a value of \$55.3 Billion in 2014, which represents a growth of 4.1% over 2013. As a result of sponsorship, Jensen and Hsu (2011) states that companies who invest significantly in sponsorship usually get better business results, which are almost always above market averages. Moreover, in comparison with advertising, sponsorship is viewed as less expensive and is often more accepted by the public because it is more indirect and builds public goodwill towards the company (Mason, 2005). Sponsorships help brands to deliver different messages to consumers while focusing

on building a solid partnership². As so, “sponsorship is a long-term investment, demanding time and effort from the sponsor to achieve consumer awareness of the sponsorship link and to convince the target audience of its sincerity and goodwill” (Walraven et al., 2014: 142). However, the link between sponsorship awareness and the affinity for the brand does not occur instantaneously (Walraven et al., 2014). Wakefield and Bennett (2010) consider sponsorship awareness as a necessary and important prior step to assess further conclusions on sponsorship effectiveness. Nevertheless, sponsorship effectiveness (or ineffectiveness) is preceded by a process that involves an image transfer from the sponsor to the consumers (Gwinner and Eaton, 1999) and the creation of a positive attitude towards the sponsor (Gwinner and Swanson, 2003). The effectiveness of a sponsorship will be verified if consumers’ willingness to purchase the sponsor’s products is higher (Tsiotsou and Alexandris, 2009). Another important topic about sponsorship that usually causes some discussion between researchers is related with its objectives. Shank (1999) considered that they are different from those associated to advertising and are divided into direct and indirect objectives. On one hand, the direct objectives focus on short-term consumer behaviour and on sales’ growth. On the other hand, in spite of latterly leading to an increase in sales, indirect objectives focus more on creating brand awareness and to develop the reputation and image of the brand. In addition, consumer’s awareness tends to increase over the years wherein the biggest increase is registered in the second year of sponsorship (Walraven et al., 2014). Recent studies refer that corporate sponsorship is nowadays the fastest growing type of marketing in the United States (Khale and Riley, 2004), which

² <http://www.sponsorship.com>

clearly shows the potential of this strategy. It can have an impact in several dimensions, such as Entertainment, Causes, Arts and other events. However, the most relevant is sport. According to Shank (1999), Sports sponsorship refers to a marketing strategy of investing in a sports entity (athlete, league, team or event) to support overall organizational objectives, marketing goals and/or promotional strategies. Sports sponsorship can actually link the aspiration and passion of a target audience to specific sports. Additionally, the concept is one of the best means to build sustainable and lifelong bonds with consumers (Buchan, 2006). And this is crucial for companies who want to hold an effective and efficient position in the marketplace. Over the past decades, Sports sponsorship is found to be not only a fundamental part of the marketing mix communication of sponsors, but also an important source of income for sponsored corporations. Researchers believe that it is an efficient mechanism to increase companies' brand image and prestige (Amis et al., 1999). Moreover, it can also help companies to differentiate from competition and create a competitive advantage. Experts predict that in 2014, sports sponsorship will represent 70% of the North American Sponsorship market, which is associated to a total spending of \$14.35 Billion (IEG, 2014).

Children Cognitive and Social Development

This study will target children between 7-11 years old, which are already in the concrete operational stage of the well-known theory of cognitive and social development suggested by Piaget. John (1999) argues that in this phase, children are able to think more abstractly and to react to different stimulus in a thoughtful way. Moreover, they can focus on multiple dimensions which help them to improve their consumer knowledge and think more

rationally. Selman (1980) states that during this phase children go through two distinct but important stages. The first one is the social informational role taking stage (between 6-8 years old), in which children begin to recognize others' different perspectives and opinions, but do not even consider them. The second one is the self-reflective role taking stages (between 8-10 years old), that differs from the previous one due to the fact that children are more predisposed to think and analyze others' points of view. It is also somewhere between their 7 and 8 years old that children start to understand the persuasive intent of advertising, by recognizing for example, the explicit purpose of commercials of influencing consumers to purchase something (Blosser and Roberts, 1985). Some consider advertising for children as an unfair advantage, once they still have little understanding of the persuasive intent of advertising, despite developing new information processing abilities (Blatt et al., 1972). Besides that, Children's brand awareness also begins to be developed in this stage as kids show much more perception about prices and product categories (John, 1999).

Sponsorship and Brands' influence on children eating habits

Children's dietary behaviour is usually influenced in several ways. Through their family, peers and other social factors, children are induced to eat according to what they use to choose. In fact, through their behaviours, attitudes and choice of home meals' structure, parents are considered to be the most powerful influence on children's nutrition (Patrick and Nicklas, 2005). Furthermore, peers are also likely to influence eating patterns during childhood (Salvy et al., 2012), mainly because those are the ones whom they interact and spend more hours with (Rubin et al., 1998). Nevertheless, experts still agree that brands' advertising can also have an impact on children's eating habits, once they can

easily associate brands to the food that they eat (Hastings et al., 2006). In fact, previous studies by Hastings et al. (2006) refer that food promotion is the marketing category that invests the most in targeting children. In addition, most of the products promoted are considered as “unhealthy”, since they contain high fat, sugar and high salt ingredients that go against the guidelines suggested by the International Dairy Foods Association (IDFA)³. Evidences also show that there are little promotion of foods that encourage children to consume products that offer a healthy eating profile, like fruits, vegetables, grains, dairy products and low fat meat (Story et al., 2008). Besides that, the evidence that food promotion of “unhealthy” products is able to influence children nutrition knowledge, food preferences and consumption patterns worsens the situation, especially when allied to the fact that children have enough power to influence their parents’ buying decisions (Hastings et al., 2006). As seen before, food brands can promote their products through several marketing tools, such as sports sponsorships. Maher et al. (2006) found out that sports sponsorships related with unhealthy products are more common than sponsorships related with healthy products. And this shows a clear dominance of unhealthy food sponsorship over healthy food, particularly targeting junior players and teams. Another important aspect is related with the effectiveness of sports sponsorships to influence children. Pettigrew et al. (2013) refer that there is enough evidence to conclude that through sponsorships, brands can actually reach younger audiences. Through a research undertaken by Kelly et al. (2013) in collaboration with the Cancer Council NSW and the Prevention Research Collaboration of the University of Sydney, experts discovered that usually sponsorship of sports is mainly

³ <http://www.idfa.org/key-issues/nutrition-health/dietary-guidelines>

done by unhealthy food brands that succeed to influence children's attitudes towards their unhealthy products. The authors say that it can even induce children to misunderstand that eating unhealthy products after doing sports is good for their health. In the food companies' point of view, it is very attractive for them to invest in children sports sponsorship, since kids have a lot of bargaining power with their parents and can influence their spending in a relatively easy way (Stead et al., 2003). Moreover, kids nowadays have already a considerable personal spending of their own and have their entire lifetime of spending still to come. Finally, food companies can take advantage of sponsoring young teams, by creating a connection with both parents and children in order to induce them to enter in their establishments and consuming their products (Maher et al., 2006).

Research Questions

After reviewing previous studies and their main findings, there are four main questions that this research aims to answer. The first question will test the knowledge and attitudes of kids towards the sponsor (brand) and the product. The second question will analyze if it is actually possible that children change their eating behaviour through sponsorship. The third one will measure children's attitudes towards healthy eating, by trying to understand if they express their intentions of having better eating habits. Finally, the last question will try to find out if kids understand the persuasive intent of the brand that is sponsoring their team. Thereby, this study aims to respond to the following research questions:

RQ1: Can healthy food brands attract and create affinity with children through sports sponsorship?

(Knowledge and Attitudes towards the Brand and the Product)

RQ2: Can healthy food brands change children's eating habits through sports sponsoring? (Behaviour)

RQ3: Do children express their intent and recognize the importance of having healthy eating habits, through sports sponsoring? (Attitudes towards Healthy Eating)

RQ4: Do children perceive the intent of the sponsoring brand? Does it affect the way they are influenced by the sponsoring? (Understanding the Persuasive Intent)

Methodology

Legal and Ethical Issues

This research strictly respected all the legal and ethical directives recommended by UNICEF (2002) that guarantee the protection of children rights. Therefore, all the questionnaires conducted were anonymous in order to make children comfortable to answer without pressure to what was asked. They were also aware about the non-existence of right or wrong answers and given the possibility of choosing not to respond to the questionnaires. Moreover, both parents, children and sports teams were clearly informed about the purpose of the study, methods used and principles of confidentiality followed. As so, their consent to gather information through this questionnaire was also achieved.

Sample

As previously mentioned, the target of this research are children between 7 and 11 years old. We choose for this research Rugby teams from the district of Lisbon⁴, and the study only targeted boys and no girls. In fact, despite children's overall food preferences are not consistent with a healthy dietetic profile, girls are usually more concerned with their food choices and tend to have better eating habits than boys (Cooke and Wardle, 2005). On one

⁴ Despite being a sport that requires some physical contact for children at these ages (Gabbett, 2002), Rugby also contributes for the development of psychological skills. Due to its relative degree of complexity, it stimulates intelligence and helps children to expand their knowledge capabilities. In addition, Rugby provides important values and teachings that remain for life, such as self-discipline, fair play, sportsmanship and social interaction <http://www.rfu.com/thegame/corevalues>

side, girls prefer fruit and vegetables more than boys do. On the other side, boys are more likely to choose over fatty and sugary foods (Robinson and Thomas, 2004). As so, we found that it could be interesting and more appropriate to apply this research only to boys, who generally have less healthful food preferences than girls at these ages and need to change and improve their eating habits (Cooke and Wardle, 2005). A total of 136 boys who play Rugby at least twice a week and belong to the under-10 and under-12 teams participated in the research.

Research Design

This study used questionnaires as a method to conduct the research. In order to effectively reduce method biases, we applied some procedures that could control their effects (Podsakoff et al., 2003). To guarantee children's honesty, it was explicitly explained that there were no right or wrong answers. In addition, the questionnaire contained simple questions with easy wording, to facilitate children's comprehension and avoid ambiguity (Tourangeau et al., 2000). Finally, in order to make children feel motivated and willing to respond to questionnaires, the anonymity of their answers was assured.

The research was an experiment, using a fictitious case where a healthy food brand would sponsor several children Rugby teams. Hence, it was necessary to choose a brand that could be recognized and known by kids (which is difficult due to the low involvement between children and food – Alvensleben et al., 1997), and also associated with a healthy dietary profile. In order to choose the brands, a qualified nutritionist⁵ gave her opinion about some familiar examples that could be considered healthy brands. Based on her experience with

⁵ Dra. Ana Mendes de Almeida

children at these ages, she preferably advised cereals, dairy products (milk and yogurt) and fish related products. As so, a sort list of brands was selected: *Nestlé*, *Danone*, *Vigor*, *Mimosa*, *Pescanova* and *Iglo*. This subset of brands was **pre-tested** with 7 children to select the one that would be more familiar to children and considered as healthier by them. The pre-test procedure was adapted from an experiment conducted by Achenreiner and John (2003). Firstly, they were requested to choose the brands they knew from those presented, and afterwards, they should pick the ones they liked the most from those they had chosen before. Finally, they had to select and rank the three brands that they considered healthier. The final chosen brand would be the one that was chosen the most in the first two questions and ranked better in the third question. Thus, the brand selected was *Mimosa*. *Mimosa* is a well-known Portuguese brand that offers a wide variety and range of dairy products that meet the needs of the different stages of children growth. Furthermore, *Mimosa's* products seek to set a commitment between flavor and nutritional balance⁶. Some of *Mimosa's* products, like milk and yogurts, are fundamental to protect children's organism against diseases and to reinforce their health⁷. On one hand, milk has an unequalled nutritional wealth since it provides important nutrients for children's organism such as proteins, carbohydrates and calcium. On the other hand, yogurts offer the same nutrients as milk, as well as probiotics and antioxidants that regulate the intestinal flora. In addition, yogurts are a good alternative to children that are intolerant to lactose and support less concentrated products better.

⁶ www.mimosa.com.pt

⁷ Dra. Ana Mendes de Almeida

Afterwards, we focused on developing the stimulus to be shown to kids that would represent the sponsorship. In other words, to decide about the type of sponsorship that should be applied. After analyzing some possibilities, it was decided that *Mimosa* would sponsor the chosen Rugby teams by fictitiously placing its logo in their shirts. Additionally, it would also be the main sponsor of the teams, which means it would be placed in the center and front of the shirts. According to Achenreiner and John (2003), children become more consciousness and familiar with the brand when the brand name or logo is more visible and exposed in advertising, clothes and uniforms and among their peers.

Procedure

A main study was conducted in order to assess the validity of the proposed research questions. As so, children from all the Rugby teams were divided into two groups: an Experimental group, where they were subject to the variable controlled (treatment effect) and a Control group, where they do not receive any stimulus. The stimulus for this main study was an image where children could see their “new” team shirt, in which was placed the brand logo in the front and center (**Figure 1**). Each team had its own colored shirt with their team logo (so that children could easily associate to its team colors), but for all of

Figure 1: Shirt’s Team Example



them the brand logo was the same. This process was different for each group. Respondents belonging to the Experimental group were given the possibility to observe the image with the “new” shirt and then respond to the questionnaire, while respondents of the Control group

were only able to see the brand logo first and then answer to the questionnaire.

Measures

In order to select the suitable scales to apply, previous studies and surveys that followed similar procedures as this one were taken into account. Regarding the **knowledge and attitudes towards the brand and the product**, we asked five questions to children in the experimental group, using a 5-point semantic scale with five differential items. This scale was based on the one used by Dixon et al. (2007). The first question asked if children knew the brand that was represented on the shirt (from 1="Unfamiliar" to 5="Familiar"). In the second question, we asked them what they thought about the brand that was on their team shirt (from 1="I hate it" to 5="I love it"). The third question asked them about their opinion regarding the logo of the brand (from 1="Not Cool at all" to 5="Very Cool"). The fourth question asked children if they like the products of the brand (from 1="I Don't Like" to 5="I Like"). Finally, in the fifth question, they were asked about the taste of the products (from 1="Tastes Bad" to 5="Tastes Good"). Questions asked to children in the control group were mainly the same, but some wording had to be changed since children were requested to observe only *Mimosa* logo and did not see the image of the shirt. In order to measure if children understood the **persuasive intent** of the brand, only the Experimental group was used, since their answers had to be answered according to the stimulus given by the specific brand. Therefore, two questions were asked to children. In the first one, they were required to identify the source of the brand logo on the team shirt. This question was adapted from Oates et al. (2003) and also used in Simões and Agante (2014). Within the possibilities of answer were five labeled pictures showing *Mimosa* logo, their team, a coach

from their team, the person doing the study and “Other” source. Children had to choose only one and would be aware of the persuasive intent of the brand if they would select the brand logo as the source. In the second question, children were asked to try to guess what the source that placed the brand logo on the shirt wanted them to do. This question was designed based on previous experiments conducted by Carter et al. (2011), Donohue et al. (1980) and Macklin (1987). Four labeled pictures were shown and the possibilities of choice were: “Play Rugby better”; “Buy the brand products”; “Buy the new shirt” and “Other”. Again, they were required to choose only one picture. It is important to make clear that the right choice would be “Buy the brand products”, once it was supposed to measure children’s perceptions about the buying intent of the brand. To test possible changes in consumer **behaviour** affected by the sponsorship, again both Experimental and Control Groups were considered. Relying on the procedure used by Goldberg et al. (1978), children were requested to imagine a situation where their parents went to work and asked the investigator to take care of them. And, since he did not know what children were supposed to eat, they could choose what they want. In the first question, six pictures with three healthy products and three unhealthy products were shown. They were asked to choose only three of those products. In the second question, six other pictures were shown, containing three different healthy products and three unhealthy products. Again, children were asked to imagine the same situation for the next day and shall pick only three products. A new variable was created to measure children’s behaviour regarding healthy products, which corresponded to the sum of all selected healthy food items. Children’s choice would be considered as healthier if they chose three or more healthy products. The maximum amount of healthy food products that children could choose was six. Exactly the

same procedure was applied for children that belong to the Control Group. Lastly, to measure children's **attitudes towards healthy eating**, both Experimental and Control Groups were considered. The procedure was adapted from a previous experiment carried out by Sangperm et al. (2008) and from a report research published by the Foods Standard Agency (2007). This variable was measured by using a 5-point Likert scale (from 1="Completely Disagree" to 5="Completely Agree") with 5 items: "Eating healthily is very important to me"; "Fast food and ready-made meals are not that bad for me"; Eating healthy food will help me grow and become healthier"; "I plan to eat more healthy products (vegetables, fruit, milk and yogurts) from now on" and "I intend to eat more healthy products (vegetables, fruit, milk and yogurts) from now on".

Results

This study was conducted with 136 Portuguese boys from five different Rugby clubs belonging to the district of Lisbon. In order to cover our target ages, we used two age ranges, the under-10 boys (7-9 years old), and the under-12's (10-11 years old). All of them were equally distributed by stimuli (53.7% or 73 boys for the Control Group and 46.3% or 63 boys for the Experimental Group). To analyze the information gathered from the questionnaires, we used the statistical program SPSS Statistics 22. Moreover, all tests performed in this experiment were both parametric and non-parametric. On the one hand, parametric tests (t-tests) are used to explain differences between the means of the variables measured on an interval scale (semantic scale or Likert scale). On the other hand, non-

parametric tests (chi-square⁸) allow us to prove the existence or not of a dependency relationship between two variables.

Knowledge and Attitudes towards the Brand and the Product

Results show that the great majority of the participants (91.2%) are familiar with the brand, which confirms our expectations from the pre-test. Children's attitudes towards the brand, the logo and the products are mostly positive but distributed between the positive values of the scale, being the highest value obtained for taste. To analyze the results related with the knowledge about the brand and its' products, t-tests were performed to compare the means between Control and Experimental groups. Results indicate that the means calculated were relatively high in both groups but the differences are not significant ($p>0.1$).

Table 1: Knowledge and Attitudes towards the Brand and the Product: T-Tests by group

| T-Tests | | | | | |
|--|--------------|----|-------|----------------|--------------|
| Item | Group | N | Mean | Std. Deviation | P-Value |
| Brand Recognition | Control | 73 | 4,781 | 0,7312 | 0,414 |
| | Experimental | 63 | 4,873 | 0,5533 | |
| Brand Attitude (Hate-Love) | Control | 73 | 3,863 | 1,0842 | 0,500 |
| | Experimental | 63 | 3,984 | 0,9918 | |
| Attitudes towards Logo (Not Cool-Cool) | Control | 73 | 3,575 | 1,2351 | 0,660 |
| | Experimental | 63 | 3,667 | 1,1640 | |
| Attitudes towards Products | Control | 73 | 4,055 | 1,1413 | 0,823 |
| | Experimental | 63 | 4,095 | 0,9283 | |
| Taste | Control | 73 | 4,356 | 1,0849 | 0,899 |
| | Experimental | 63 | 4,333 | 0,9837 | |
| Knowledge and Attitudes Average | Control | 73 | 4,126 | 0,6852 | 0,540 |
| | Experimental | 63 | 4,190 | 0,5073 | |

⁸ Due to the small size of the sample, we used the Likelihood Ratio to test the significance of each relation between variables. This ratio measures the strength of association when the sample is too small and there is a need to guarantee a reliable analysis.

However, the chi-square tests provided some significant results (Table 2). First of all, by comparing the brand recognition and the group of analysis, we can say that children who see the brand on the shirt tend to be more familiar with it ($p=0.07$). Secondly, and unexpectedly, regarding the attitude towards the product, children who did not see the shirt with the logo seem to be more engaged with the products of that brand ($p=0.10$). In fact, children's answers in the Experimental group are also positive but much more distributed than those in the Control Group.

Table 2: Brand Recognition and Attitudes towards Products by group: Chi-Square Analysis

| | | Brand Recognition | | Attitudes towards Products | |
|----------------|--------------------|-------------------|--------------|----------------------------|--------------|
| | | Group | | Group | |
| | | Control | Experimental | Control | Experimental |
| Scale | 1 Frequency | 1 | 1 | 3 | 1 |
| | % of Group | 1,4% | 1,6% | 4,1% | 1,6% |
| | 2 Frequency | 1 | 0 | 2 | 0 |
| | % of Group | 1,4% | 0,0% | 2,7% | 0,0% |
| | 3 Frequency | 4 | 0 | 21 | 18 |
| | % of Group | 5,5% | 0,0% | 28,8% | 28,6% |
| | 4 Frequency | 1 | 4 | 9 | 17 |
| | % of Group | 1,4% | 6,3% | 12,3% | 27,0% |
| | 5 Frequency | 66 | 58 | 38 | 27 |
| | % of Group | 90,4% | 92,1% | 52,1% | 42,9% |
| P-Value | | 0,071 | | 0,104 | |

Overall, the results suggest that sponsorship affects positively the knowledge about the brand and negatively the attitudes towards the product. However, it does not have an impact in attitudes towards the shirt and logo as well as in the opinion about the taste of the products. As so, there is no statistical evidence to confirm that sponsorship of healthy food brands attracts and creates affinity with children. Consequently, we reject RQ1.

Behaviour

As previously referred, participants had to choose six products from a total of twelve (six healthy and six unhealthy). The idea was then to compare the answers between the two different groups (Experimental and Control) and confirm that children who saw the shirt with the logo would pick more healthy products than those who did not see it. And that would tell us if they would be more willing to change their eating behaviour or not., Results show that from those who saw the shirt (experimental group), only 57.1% chose three or more healthy products, while 67.1% of the participants who did not see the shirt (control group) chose three or more healthy products. This apparent difference was not significant ($p=0.136$) and therefore, there is not sufficient evidence to support RQ3.

Attitudes towards Healthy Eating

The last research question was designed to try to understand if children recognize the importance of healthy eating and are willing to improve their eating habits. Results show that 92.6% agree that eating healthily is very important and 94.9% think that eating healthily will help them grow. In addition, 79.4% plans to eat more healthily and 80.9% intend to eat more healthily, in the near future. Yet, only 34.6% of the participants see fast food as bad for them. To test attitudes towards healthy eating and compare the results obtained from Control and Experimental Groups, we performed t-tests and chi-square tests on the overall variable and on each item, but none of the differences was statistically significant ($p>0.1$). Overall, we can conclude that although sponsorship seems to have an impact on attitudes towards healthy eating, there is no statistical evidence to ensure that children who receive the shirt stimulus will be more aware about the importance of having better eating habits and thinking about changing it in a near future. As so, we reject RQ4.

Table 3: Tests on Attitudes towards Healthy Eating by group

| Item | Group | Mean | T-test (P-Value) | Qui-square test (P-Value) |
|--|--------------|-------|---------------------|------------------------------|
| Healthy eating is important | Control | 4,521 | 0,398 | 0,637 |
| | Experimental | 4,619 | | |
| Fast food is not bad | Control | 2,986 | 0,403 | 0,193 |
| | Experimental | 3,159 | | |
| Healthy eating helps growth | Control | 4,575 | 0,655 | 0,740 |
| | Experimental | 4,635 | | |
| Planning to eat healthily | Control | 4,123 | 0,982 | 0,918 |
| | Experimental | 4,127 | | |
| Intention to eat healthily | Control | 4,055 | 0,689 | 0,867 |
| | Experimental | 4,127 | | |
| Attitudes towards healthy eating Average | Control | 4,052 | 0,431 | - |
| | Experimental | 4,133 | | |

Understanding the Persuasive Intent

Regarding the analysis of understanding the persuasive intent of the brand, only the Experimental group was considered. Results show that the great majority of the participants weren't able to identify the source of the placement on the shirt or to recognize the persuasive intent of the brand. Indeed, only 20.6% identified the source of the placement as being Mimosa, and only 31.7% understood the persuasive intent to buy the brand. To test for a potential association between sponsor's influence and recognition of the persuasive intent, a chi-square analysis was performed. We crossed the variables related with the identification of the source of placement and recognition of the persuasive intent with the variable associated to changes in behaviour (measured by the total number of healthy products picked by the participants). Results show that very few participants were able to identify the source and understand the persuasive intent while picking more than three healthy products. However, there is statistical evidence that understanding the persuasive

intent is related with picking healthy products ($p=0.09$). Therefore, we only accept RQ2 partially, in the sense that only children who understand the intent of the brand are induced to change their eating habits, which means, the understanding of the persuasive intent generated a response to cope with that intent and thus choose more healthy items.

Table 4: Understanding Persuasive Intent by Total Healthy products picked: Chi-Square Analysis

| Total Healthy products picked (%) | Identify source of placement of the logo | | Understand persuasive intent | |
|-----------------------------------|--|-------|------------------------------|-------|
| | Wrong | Right | Wrong | Right |
| Less than three | 40% | 53,9% | 53,5% | 20% |
| Three or more | 60% | 46,1% | 46,5% | 80% |
| P-Value | 0,375 | | 0,090 | |

We also continued this analysis to see to what extent the persuasion knowledge of the child significantly affected other attitudes. **Firstly**, we crossed the same variables with those related with attitudes towards healthy eating. The results showing the association (p -values) between variables are presented in table 5. **Secondly**, we proceeded to the crosstab between the same variables and those related with knowledge and attitudes towards the brand and the product (table 6).

Table 5: Understanding Persuasive Intent and Attitudes towards Healthy Eating: Chi-Square Analysis

| | Healthy eating is important | Fast food is not bad | Healthy eating helps growth | Planning to eat healthily | Intention to eat healthily |
|------------------------------|-----------------------------|----------------------|-----------------------------|---------------------------|----------------------------|
| Identify source of placement | 0,072 | 0,551 | 0,166 | 0,031 | 0,005 |
| Understand persuasive intent | 0,047 | 0,097 | 0,255 | 0,097 | 0,077 |

Table 6: Understanding Persuasive Intent and Knowledge and Attitudes towards the Brand/Product: Chi-Square Analysis

| | Brand Recognition | Brand attitude (Hate-Love) | Attitude towards the logo (Cool-Not Cool) | Attitudes towards products | Taste |
|------------------------------|-------------------|----------------------------|---|----------------------------|-------|
| Identify source of placement | 0,072 | 0,860 | 0,095 | 0,582 | 0,052 |
| Understand persuasive intent | 0,644 | 0,219 | 0,017 | 0,571 | 0,626 |

Discussion and Implications

The aim of this study was to analyze if children were affected by sponsorship and able to understand the intent of sponsors. Furthermore, this study also aimed to test if sports sponsorship were a good way to influence children consumer behaviour towards healthy food brands and to promote a better diet among them. The results indicate that this specific case of sponsoring children's Rugby teams is not an effective strategy to influence their attitudes towards healthy eating. In fact, there are almost no differences between participants who received the stimulus and those who did not. However, there are obviously other possible alternatives that could turn over children sports sponsorship into an effective communication tool. Therefore, it is crucial for companies focused on promoting healthy food brands to find a way to take advantage of this marketing strategy and drive children attention towards the importance of making healthy food choices on every stages of their childhood.

Knowledge and Attitudes towards the Brand and the Product

Since the great majority of children are already familiar with the brand, seeing it or not in the shirt does not seem to alter their perceptions regarding knowledge and attitudes towards the brand and its' products. Furthermore, we could not find any clear association between

the groups of observation and the items related with the liking for the brand, its' logo and taste. However, there is an association between knowledge and the group observed, showing that sponsoring could be a good driver for children to get familiar with new healthy food brands. Besides that, the group is also associated with the participants' opinion regarding the products of the brand. But surprisingly, these results suggest that children who see only the brand logo like the products more. And this leads us to believe that maybe children like the products but not when they see them associated with their favorite sport. Hence, brands who want to create a relationship with sports should be cautious when building their strategy and analyzing its effectiveness. Besides, kids could also give much importance to what is familiar to them. In fact, they could be used to play with the current shirt and do not go along with a new shirt, which seems unfamiliar or different.

Behaviour

As previously referred, there is no association between the products selection and the group observed. Results show that children who did not see the shirt tend to choose more healthy products. This could mean that the logo, only by itself, drives their attention to the need of choosing healthy food in the questionnaire. Maybe they think the questionnaires were assessing their eating choices and want to look as healthier as possible to the evaluator. On the opposite, children who see the brand logo on the shirt could be less focused on it and do not realize the evaluator is assessing their healthy behaviour. As so, their recall rate towards the logo during the questionnaire might be lower. It is also interesting to see what healthy and unhealthy products were chosen the most. On one side, the top three unhealthy products picked by children were hamburger (67.6%), cookies (52.9%) and hotdog/French

fries (52.2%). Indeed, children express their preferences for fatty and sugary foods, which are consistent with previous findings (Cooke and Wardle, 2005). On the other side, the most chosen healthy products were banana (69.1%), milk (57.4%) and mixed fruits (57.4%). It is particularly importance to enhance the inclusion of fruit items as it already happened before (Cooke and Wardle, 2005). The choice of milk over yogurt is also unexpected since usually children tend to support better yogurts, which are less concentrated and more tasteful.

Attitudes towards Healthy Eating

Regarding the analysis of children's attitudes towards healthy eating, despite children who see the shirt give higher scores to the scale items, there is no statistical evidence to conclude that seeing the shirt will encourage them to give more importance to eating healthily. In general, results show that regardless of being subject to the treatment effect, children already demonstrate to have good attitudes towards healthy eating. The exception is their opinion about fast food. In fact, although fast-food is not a daily habit and people take it for reasons such as convenience and busy lifestyle (Paeratakul et al., 2003), it is very popular among kids and it is believed that contributes to a poor diet. An interesting assumption to think of is that maybe children see this example as a real sponsoring possibility for their team and give lower marks because they are hopeful about that chance. As so, the main suggestions that should be given are related with promoting actions that could combat or hold back fast food sponsorships to children sports teams. As sports sponsoring is increasing as an important source of funding for sports teams and as a significant form of promoting food and beverages, regulators and the clubs themselves

should be watchful for the threats that may arise from sponsorship agreements with fast food brands.

Understanding the Persuasive Intent

By analyzing the results related with the understanding of the persuasive intent of the brand, we rejected the hypothesis that assumed that children were able to identify the main responsible for a sponsorship agreement in sports. A possible explanation for this inability could be the fact that children think that there are many parts involved in the process (which in some way is true) and are not entirely sure about the one that plays the bigger role. Besides that, most of the participants had chosen their team as the responsible for the placement of the logo on the shirt, which shows that many children are not nearly aware of the correct source of sponsorship. Regarding the recognition of the persuasive intent of the brand, few participants were able to understand that the brand wants them to buy its products. However, from all the alternatives available, this was the one that has been picked the most (31.7%). Even so, the difference is not significant at all, with the rest of the participants choosing the options “Play Rugby better” (30.2%) or “By the new shirt” (27%) as the right intention. These results can be explained by the fact that sponsorship is still seen by children as a confusing marketing tool and it can be more complicated for them to understand its’ persuasive intent than it is with television advertising (Oates et al., 2002). Moreover, it is generally easier for children to understand the informational intent of advertising rather than the persuasion or selling intent, which is more complex and requires an upper level of comprehension (Martin, 1997). By looking to the chi-square test between the recognition of the persuasive intent of the brand and the total number of healthy

products chosen, we can see that, from those participants who understood the persuasive intent of the brand, the great majority of them picked more than three healthy products. These results lead us to believe that when children have more persuasion knowledge, they tend to cope with the intended behavior, and to choose wisely. However, we also found that the majority of children that identified the source of placement and understood the persuasive intent tended to be less influenced regarding attitudes towards planning and intending to eat healthily. This is very interesting since they understand the role of the brand but do not let themselves be influenced by it in a conscious way (by agreeing with the attitude statements) but cope with it in an unconscious way (by choosing more healthy items). Finally, we discovered that children who guess the source of the placement and understand the persuasion intent find the logo of the brand cooler. In addition, there was a significant percentage of participants who identified the source of placement and rated the products taste with higher marks. These results indicate that generally children are still a little bit confused about the sponsoring process and do not understand it completely, making it hard for them to filter what is good or not for their health, and also making different decisions whether to cope or not with the desired behavior (Friestad and Wright, 1994).

Limitations and Future Research

This research presents several limitations that should be taken into account as an example to improve in future research. Firstly, it is only applied to one type of sport, which is Rugby, and to boys. It would be interesting to perform it to other team sports like Soccer or Basketball and with girls. In fact, kids playing the same sport are likely to have more or less

the same background and education and their opinions tend to be similar, but mixing different sports and gender could lead to a greater diversity and thus enhance some results that were not evident here. Beyond that, only Rugby teams belonging to the district of Lisbon were considered. There could be differences in terms of social background and habits between children from Lisbon and from other points of the country, like the North or South. Furthermore, it is also interesting to take this research abroad of Portugal and perform it in other countries with different cultures. Another limitation is related with the familiarity of the brand to the great majority of the participants. Therefore, we suggest to take the same study but with unfamiliar brands. Finally, this study was based on a fictitious case of a brand logo placement on Rugby teams' shirts. Further research could look upon studying the impact of a real case of sponsorship during a significant period of time, so that children could really experience it. It might be more difficult to perform but it would certainly allow taking more reliable conclusions.

References

- Achenreiner, G. B., & John, D. R.** (2003). The meaning of brand names to children: A developmental investigation. *Journal of Consumer Psychology*, 13(3), 205-219.
- Alvensleben, R. V., Padberg, D. I., Ritson, C., & Albisu, L. M.** (1997). Consumer behaviour. *Agro-food marketing.*, 209-224.
- Amis, J., Slack, T., & Berrett, T.** (1999). Sport sponsorship as distinctive competence. *European journal of marketing*, 33(3/4), 250-272.
- Blatt, J., Spencer, L., & Ward, S.** (1972). A cognitive development study of children's reactions to television advertising. *Television and social behavior*, 4, 452-67.
- Blosser, B. J., & Roberts, D. F.** (1985). Age differences in children's perceptions of message intent: Responses to TV News, Commercials, Educational Spots, and Public Service Announcements. *Communication Research*, 12(4), 455-484.
- Buchan, Nick** (2006). Sports Sponsorship – Still Giving Enough bang for the Buck?. *B&T Weekly*, 56 (2567), 5.
- Carter, O. B., Patterson, L. J., Donovan, R. J., Ewing, M. T., & Roberts, C. M.** (2011). Children's understanding of the selling versus persuasive intent of junk food advertising: Implications for regulation. *Social Science & Medicine*, 72(6), 962-968.

- Cooke, L. J., & Wardle, J.** (2005). Age and gender differences in children's food preferences. *British Journal of Nutrition*, 93(05), 741-746.
- Cornwell, T. B., & Maignan, I.** (1998). An international review of sponsorship research. *Journal of Advertising*, 27(1), 1-21.
- Dixon, H. G., Scully, M. L., Wakefield, M. A., White, V. M., & Crawford, D. A.** (2007). The effects of television advertisements for junk food versus nutritious food on children's food attitudes and preferences. *Social science & medicine*, 65(7), 1311-1323.
- Donohue, T. R., Henke, L. L., & Donohue, W. A.** (1980). Do kids know what TV commercials intend. *Journal of Advertising Research*, 20(5), 51-57.
- Friestad, M., Wright, P.** (1994). The Persuasion Knowledge Model: how People Cope with Persuasion Attempts. *Journal of Consumer Research*, 21(1), 1-31
- Gabbett, T. J.** (2002). Physiological characteristics of junior and senior rugby league players. *British Journal of Sports Medicine*, 36(5), 334-339.
- Goldberg, M. E., Gorn, G. J., & Gibson, W.** (1978). TV messages for snack and breakfast foods: do they influence children's preferences?. *Journal of Consumer Research*, 73-81.
- Gwinner, K. P., & Eaton, J.** (1999). Building brand image through event sponsorship: the role of image transfer. *Journal of advertising*, 28(4), 47-57
- Gwinner, K., & Swanson, S. R.** (2003). A model of fan identification: antecedents and sponsorship outcomes. *Journal of services marketing*, 17(3), 275-294.
- Hastings, G., McDermott, L., Angus, K., Stead, M., & Thomson, S.** (2006). The extent, nature and effects of food promotion to children: a review of the evidence. *Geneva: World Health Organisation*.
- International Events Group (IEG).** (2014). Sponsorship Spending Growth Slows In North America As Marketers Eye Newer Media And Marketing Options. <http://www.sponsorship.com/IEGSR/2014/01/07/Sponsorship-Spending-Growth-Slows-In-North-America.aspx> (accessed September 24, 2014)
- Jensen, J. A., & Hsu, A.** (2011). Does sponsorship pay off? An examination of the relationship between investment in sponsorship and business performance. *International Journal of Sports Marketing & Sponsorship*, 12(4).
- John, D. R.** (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of consumer research*, 26(3), 183-213.
- Kahle, L. R., & Riley, C.** (Eds.). (2004). *Sports marketing and the psychology of marketing communication*. Psychology Press.
- Kelly, B., Chapman, K., Baur, L., Bauman, A., King, L., & Smith, B.** (2013). Building Solutions to Protect Children from Unhealthy Food and Drink Sport Sponsorship.
- Macklin, M. C.** (1987). Preschoolers' understanding of the informational function of television advertising. *Journal of Consumer research*, 229-239.
- Maher, A., Wilson, N., Signal, L., & Thomson, G.** (2006). Patterns of sports sponsorship by gambling, alcohol and food companies: an Internet survey. *BMC Public Health*, 6(1), 95.
- Martin, M. C.** (1997). Children's understanding of the intent of advertising: a meta-analysis. *Journal of Public Policy & Marketing*, 205-216.
- Mason, K.** (2005). How corporate sport sponsorship impacts consumer behavior. *Journal of American Academy of Business*, 7(1), 32-35.
- Oates, C., Blades, M., & Gunter, B.** (2002). Children and television advertising: When do they understand persuasive intent?. *Journal of Consumer Behaviour*, 1(3), 238-245.
- Oates, C., Blades, M., Gunter, B., & Don, J.** (2003). Children's understanding of television advertising: a qualitative approach. *Journal of Marketing Communications*, 9(2), 59-71.
- Omnibus Research Report.** (2007). Children's attitudes towards food - Prepared for the Food Standards Agency by COI. <http://dera.ioe.ac.uk/6787/1/childrensresearchfeb2007.pdf> (accessed October 10, 2014)

- Paeratakul, S., Ferdinand, D. P., Champagne, C. M., Ryan, D. H., & Bray, G. A.** (2003). Fast-food consumption among US adults and children: dietary and nutrient intake profile. *Journal of the American Dietetic Association*, 103(10), 1332-1338.
- Patrick, H., & Nicklas, T. A.** (2005). A review of family and social determinants of children's eating patterns and diet quality. *Journal of the American College of Nutrition*, 24(2), 83-92.
- Pettigrew, S., Rosenberg, M., Ferguson, R., Houghton, S., & Wood, L.** (2013). Game on: do children absorb sports sponsorship messages?. *Public health nutrition*, 16(12), 2197-2204.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P.** (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Robinson, C. H., & Thomas, S. P.** (2004). The interaction model of client health behavior as a conceptual guide in the explanation of children's health behaviors. *Public Health Nursing*, 21(1), 73-84.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G.** (1998). Peer interactions, relationships, and groups. *Handbook of child psychology*.
- Salvy, S. J., De La Haye, K., Bowker, J. C., & Hermans, R. C.** (2012). Influence of peers and friends on children's and adolescents' eating and activity behaviors. *Physiology & behavior*, 106(3), 369-378.
- Sangperm, P., Tilokskulchai, F., Phuphaibul, R., Vorapongsathon, T., & Stein, K.** (2008). *Predicting adolescent healthy eating behavior using subjective norms, intention and self-schema*. Mahidol University.
- Selman, R. L.** (1980). *The growth of interpersonal understanding* (p. 24). New York: Academic Press.
- Shank, M. D.** (1999). Sports marketing: A strategic perspective. *Pearson/Prentice Hall*.
- Simoes, I., & Agante, L.** (2014). The impact of event sponsorship on Portuguese children's brand image and purchase intentions: The moderator effects of product involvement and brand familiarity. *International Journal of Advertising*, 33(3), 533-556.
- Stead, M., McDermott, L., Forsyth, A., MacKintosh, A. M., Rayner, M., Godfrey, Caraher, M. & Angus, K.** (2003). *Review of research on the effects of food promotion to children* (pp. 1-218). Glasgow: Centre for Social Marketing, University of Strathclyde.
- Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K.** (2008). Creating healthy food and eating environments: policy and environmental approaches. *Annu. Rev. Public Health*, 29, 253-272.
- Tourangeau, R., Rips, L. J., & Rasinski, K.** (2000). *The psychology of survey response*. Cambridge University Press.
- Tsiotsou, R., & Alexandris, K.** (2009). Delineating the outcomes of sponsorship: sponsor image, word of mouth, and purchase intentions. *International Journal of Retail & Distribution Management*, 37(4), 358-369.
- UNICEF.** (2002). Children Participating in Research, Monitoring, and Evaluation (M&E)—Ethics and Your Responsibilities as a Manager. *Evaluation Technical Notes*, (1), 1-11.
- Wakefield, K. L., & Bennett, G.** (2010). Affective intensity and sponsor identification. *Journal of Advertising*, 39(3), 99-111.
- Walraven, M., Bijmolt, T. H., & Koning, R. H.** (2014). Dynamic Effects of Sponsoring: How Sponsorship Awareness Develops Over Time. *Journal of Advertising*, 43(2), 142-154.